HARSHAW/FILTROL

CODE: 15252

PRODUCT NAME Nickel Oxide

MATERIAL SAFETY DATA SHEET (Similar to OSHA Form 20)

DATE: 08/24/84

H-33-84-WP = SECTION I -- IDENTIFICATION = EMERGENCY TELEPHONE 216/292-9200 SUPPLIER'S NAME Harshaw/Filtrol Partnership CHEMICAL NAME Nickel Oxide ADDRESS 30100 Chagrin Blvd. Cleveland, Ohio 44124 CAS No. 1313-99-1 U.N. No. Not applicable FORMULA NiO D.O.T. CLASSIFICATION Not regulated SECTION II -- HAZARDOUS INGREDIENTS OF MIXTURES = Threshold Limit Value Material or Component % Not applicable SECTION III -- PHYSICAL DATA == Not applicable MELTING POINT BOILING POINT Not applicable SPECIFIC GRAVITY (H20=1) 6.6-6.8 VAPOR PRESSURE Not applicable SOLUBILITY IN H2O (% by Wt.) Insoluble VAPOR DENSITY (Air=1) Not applicable EVAPORATION RATE (Butyl Acetate=1) % VOLATILES BY VOLUME Not applicable Not applicable APPEARANCE AND ODOR Green, odorless powder SECTION IV -- FIRE AND EXPLOSION DATA = Not a fire or explosion hazard. SECTION V -- HEALTH HAZARD DATA -THRESHOLD LIMIT VALUE 1mg/m³ as Nickel Metal (ACGIH, 1984) EFFECTS OF OVEREXPOSURE Eye contact causes irritation. Skin contact causes irritation and may cause sensitization or allergic skin reactions which may be accentuated by heat and humidity. Inhalation of dust causes irritation of upper respiratory tract. Individuals hypersensitive to nickel may develop asthma, bronchitis, shortness of breath or wheezing.

NOTE: The insoluble nickel compound(s) in this product have been determined to cause cancer in laboratory animals. No conclusive evidence of human carcinogenicity has been found to date. Nickel metal, nickel oxide and nickel carbonate are listed in the National Toxicology Program's Third Annual Report on Carcinogens, 1983, and the International Agency for Research on Cancer Monograph, Vol. II, 1976. EMERGENCY AND FIRST AID PROCEDURES Eye and Skin contact: Immediately flush eyes with plenty of water for at least 15

<u>Inhalation</u>: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

minutes. Call a physician. Flush skin with water.

= DATE: 08/24/84 ==== SECTION VI REACTIVITY DATA ==== CODE: 15252 ===
CONDITIONS CONTRIBUTING TO INSTABILITY None expected
INCOMPATIBILITY None expected
HAZARDOUS DECOMPOSITION PRODUCTS None expected
SECTION VII SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED If not contaminated, scoop up for reuse. If contaminated, scoop or vacuum into container for disposal. Avoid dusting.
WASTE DISPOSAL METHOD Dispose of in accordance with Federal, state and local laws.
SECTION VIII PROTECTIVE EQUIPMENT
VENTILATION General; local exhaust ventilation as necessary to control dust.
PERSONAL PROTECTIVE EQUIPMENT Chemical goggles. Gloves A NIOSH/MSHA approved respirator as necessary
SECTION IX SPECIAL PRECAUTIONS =
Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed.
SECTION X PERSONNEL SAMPLING PROCEDURE
Refer to NIOSH Manual of Analytical Methods, 2nd Edition, Method S206 for information on monitoring for airborne materials containing nickel.
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